

Title (en)
Micro-equilibrium dialysis vertically loaded apparatus

Title (de)
Senkrecht geladene Mikrodialysevorrichtung zur Gleichgewichtsdialyse

Title (fr)
Appareil à chargement vertical pour la micro-dialyse à l'équilibre

Publication
EP 1088589 A3 20030618 (EN)

Application
EP 00308255 A 20000921

Priority
US 15680099 P 19990930

Abstract (en)
[origin: EP1088589A2] An improved device for equilibrium dialysis procedures utilizing a dialysis membrane inserted in a gap in and separating all of any number of test wells contained in the dialysis block into at least a donating and receiving side which can be accessed and manipulated at any time during testing from the top of the device. The device may be constructed from a series of nine blocks of virgin teflon, cut and made flat to achieve certain dimensions ideal for making the device compatible with standard 96-well format laboratory equipment and conducive to robotic automation. The bars are placed side-by-side and connected by a pair of alignment pins along which the bars can slide on a horizontal plane relative to one another, individually or collectively, to aid in assembly, usage and cleaning. The bars are further held together during usage by a clamping mechanism to prevent any leakage of the sample being tested. Such wells are formed in an 8x12 array such that a diameter of each of the wells of a particular row corresponds to and overlaps with the separation gap between successive rows of the bars. The dialysis membranes are inserted into the gaps during assembly of the device, with one membrane inserted between each of the eight gaps formed between the nine rows of bars. The advantages of an equilibrium dialysis apparatus constructed in this manner include decreased cost, increased efficiency and ease in testing, and increased flexibility in testing methods. <IMAGE>

IPC 1-7
B01L 3/00; **B01D 61/28**

IPC 8 full level
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CPC (source: EP)
B01D 61/28 (2013.01); **B01L 3/5025** (2013.01); **B01L 3/50255** (2013.01); **B01L 2300/0829** (2013.01)

Citation (search report)
• [X] WO 9921958 A1 19990506 - GLAXO GROUP LTD [GB], et al
• [A] US 5326533 A 19940705 - LEE CAROLYN [US], et al
• [A] ES 2126445 A1 19990316 - UNIV SEVILLA [ES]

Cited by
CN106237858A; US6458275B1; US11278658B2; US11737925B2; US10058642B2; US10105471B2; US10842919B2; US10350339B2; US10363346B2; US11730874B2; US10207035B2; US10265445B2; US11298454B2; US11376356B2

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